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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,450	02/20/2002	John S. Foong	4808	7381

7590

04/22/2005

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EXAMINER

JOHNSON, CHRISTINA ANN

ART UNIT

PAPER NUMBER

1725

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,450

Applicant(s)

FOONG ET AL.

Examiner

Christina Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5, 8-19, 21, 24, 28 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-12 is/are allowed.
- 6) ☒ Claim(s) 3-5, 8, 9, 13-19, 21, 24, 28 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 3-5, 8-9, 13-19, 21, 24, 28, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Deeba et al.

Deeba et al. (US 5,874,057) discloses a NO_x trap composition useful in the purification of exhaust gas. The composition comprises a NO_x sorbent material and a NO_x abatement catalyst, including a catalytic metal (column 2, lines 65-69). Deeba et al. teaches that the composition is characterized by the catalytic metal components being segregated from the NO_x sorbent materials (column 3, lines 5-10). The reference teaches that the composition may be in layer form on a substrate, with a first layer containing the NO_x sorbent material and the second layer formed in the first containing the NO_x abatement catalyst (column 7, lines 55-65 and Figure 1). The composition may also contain an intermediate layer (column 7, lines 20-30).

The NO_x sorbent material comprises at least one basic oxygenated metal compound and may be dispersed on a refractory support material such as alumina or present in bulk form (column 8, lines 15-20). Suitable compounds include oxides of magnesium, calcium, strontium, and barium (column 8, lines 15-30). This metal oxide is present in amounts of 0.05 to 3 g/in³ (column 8, lines 30-35).

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The NO_x abatement catalyst comprises a platinum catalytic metal component and optionally, one or more other platinum group metal components such as palladium and rhodium (column 9, lines 1-10). It is taught that in a typical composition, the amount of platinum group metal will be from about 5-150 g/ft³, and of that amount, platinum will typically comprise about 4-125 g/ft³ (column 9, lines 15-21). It is taught that the catalytic metal is supported on gamma alumina, which may be stabilized with lanthanum or other rare earth oxides (column 9, lines 20-45).

The compositions may be formed as layers on a monolithic structure such as a cordierite honeycomb structure (column 9, lines 24-26).

As each and every element of the claimed invention is taught in the prior art as recited above, the claims are anticipated by Deeba et al.

Allowable Subject Matter

3. Claims 10-12 are allowed. Reasons for Allowance were provided in the previous Office Action.

Response to Arguments

4. Applicant's arguments filed January 31, 2005 have been fully considered but they are not persuasive.

Applicant argues generally that the reference does not disclose the limitations of independent claim 1. However, applicant has not pointed out which elements of the claim are missing from the reference or demonstrated how the language of the instant

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claim distinguishes over the reference. As discussed above, it is the position of the examiner that the Deeba reference teaches each and every element of the claimed invention. Refer also to columns 2-3 and 7-9.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Johnson whose telephone number is (571) 272-1176. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Christina Johnson
Patent Examiner
Art Unit 1725
4/19/05

CAJ
April 19, 2005